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Impact of co-morbid personality disorder on quality of inpatient mental health services for people with anxiety and depression

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ABSTRACT

Introduction – *Concerns have been raised about the quality of inpatient care received by patients with a diagnosis of personality disorder.*

Objectives – *The aim of this study was to examine the quality of care received by inpatients with an anxiety or depressive disorder, comparing subgroups with or without a co-morbid personality disorder.*

Method – *We used a retrospective case-note review of 3 795 patients admitted to inpatient psychiatric wards in England, utilizing data from the National Clinical Audit of Anxiety and Depression. Data were gathered on all acute admissions with an anxiety or depressive disorder over a 6-month period, for a number of measures reflecting quality of care derived from national standards. Association of coexisting personality disorder with quality of care was investigated using multivariable regression analyses.*

Results – *Four hundred sixteen (11.0%) of the patients had a co-co-morbid diagnosis of personality disorder. Patients with personality disorder were less likely to have been asked about prior responses to treatment in their initial assessment (odds ratio (OR) = 0.67, 95% confidence interval (CI) 0.50 to 0.89, p = 0.007). They were less likely to receive adequate notice in advance of their discharge (OR = 0.87, 95% CI 0.65 to 0.98, p = 0.046). They were more likely to be prescribed medication at the point of discharge (OR = 1.52, 95% CI 1.02 to 2.09, p = 0.012) and less likely to have been provided with information about the medicines they were taking (OR = 0.86, 95% CI 0.69 to 0.94, p = 0.048). In addition, the carers of patients with co-morbid personality disorder were less likely to have been provided with information about available support services (OR = 0.73, 95% CI 0.51 to 0.93, p = 0.045).*

Conclusion – *We found evidence of poorer quality of care for patients with co-morbid personality disorder who were admitted to psychiatric hospital for treatment of anxiety or depressive disorders, highlighting the need for improved clinical care in this patient group.* © *2020 John Wiley & Sons, Ltd.*

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Introduction

Anxiety disorders and unipolar depression are common conditions, ranking first and second respectively out of all mental disorders in lifetime prevalence.[1] Personality disorders frequently coexist (i.e. are 'co-morbid') with these conditions[1,2] and have been associated with increased functional impairment and worse treatment outcomes,[3–9] with increased cost to healthcare systems.[10] For example, a meta-analysis of treatment for depression showed that patients with co-morbid personality disorder had a twofold risk of inadequate response to antidepressant treatment.[11]

The reasons for a lower chance of optimal outcomes are unclear. While 'patient factors' such as adherence to treatment are important,[12] there may also be factors relating to quality of care that patients receive. Poor therapeutic alliance and staff attitudes are likely to be implicated—the pervasive stigma associated with diagnoses of personality disorder has been well characterized, and unfortunately, psychiatric services are not exempt from this.[13] Patients with the diagnosis of personality disorder are often viewed as 'less unwell' and 'more in control' of their behaviour than individuals with other diagnoses,[14] and there can be strongly held views that their admission to inpatient settings is unjustified compared with that of individuals with other diagnoses.[15]

The use of pharmacological treatments in patients with personality disorder is controversial,[16] and current National Institute for Health and Care Excellence (NICE) guidance advises against using medications directly to treat borderline personality disorder or its symptoms, except for short-term treatment during a crisis.[17] Concerns have also been raised about the potential overuse of medication and poor monitoring for side effects when psychotropic drugs are prescribed to these patients.[18] However, research into clinical practice has repeatedly found that patients with personality disorder are routinely prescribed more psychotropic medication than those without such a diagnosis, irrespective of co-morbid mental disorders.[19]

Inpatients with personality disorder have higher levels of unmet need than those with other conditions,[20] and front-line clinicians have reported concerns about the quality of inpatient care for patients with the diagnosis of borderline personality disorder.[13,15,21–23] Most studies of the general quality of inpatient care for patients with personality disorder have been qualitative[24] and have lacked validated outcome measures, focusing instead on exploring service users' subjective experiences of care.[25–27]

To date, there have been no other studies specifically examining inpatient care for anxiety and depression, for patients with co-morbid personality disorder. We therefore aimed to investigate whether the presence of a co-morbid personality disorder affects the quality of care received by inpatients with a primary diagnosis of an anxiety or depressive disorder. We conducted a secondary analysis of data from a national audit of inpatient care for people with anxiety and depression and examined the impact of co-morbid personality disorder on a broad range of care quality indicators.

Methods

Setting and participants

Data were collected as part of the National Clinical Audit of Anxiety and Depression in England. A detailed account of the methods used in the audit is available elsewhere.[28] All National Health Service (NHS)-funded inpatient mental health services in England that provide care to adult patients with diagnoses of anxiety and/or depressive disorders were invited to take part.

All participating organizations were asked to provide an anonymized list of eligible patients admitted to hospital between 1 April and 30 September 2017. Where patients had more than one admission during this sampling window, only the first admission was used. Patients were eligible for inclusion in the audit if they were aged 16 years

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or above and had a primary diagnosis of an anxiety or depressive disorder at the point of discharge (ICD-10 coding). Patients were excluded if they had a primary diagnosis of any psychotic disorder (including F32.3 severe depressive episode with psychotic symptoms), bipolar affective disorder, cyclothymia or mania or if they were admitted to a forensic service or long-stay ward such as a rehabilitation service.

Data collection

A total of 54 organizations providing mental health services took part in the audit. Staff from each organization were asked to complete an online 'audit of practice' tool for each of their sampled patients, using data from clinical records only. Five of each organization's sampled patients were audited twice by two separate auditors, and the results were compared by the audit team to determine interrater reliability. Three organizations were also selected at random for quality assurance visits by an external clinician and member of the audit team to examine whether the submitted data were accurate.

The data collection tool was based on NICE guidance for inpatient services[29–31] and the 'Standards for Inpatient Mental Health Services' as defined by the Royal College of Psychiatrists' College Centre for Quality Improvement[32] and was developed in collaboration with users and providers of psychiatric inpatient services, as well as representatives with lived experience of supporting patients. It included questions on patient demographics, details of admission (time/date of admission/discharge), diagnosis, assessment, care planning, medication, psychological therapies, physical health, discharge, readmission, crisis planning and follow-up. The tool was piloted by six volunteer trusts prior to the main audit, to ensure the process was understandable and feasible with the guidance documents provided.

The National Research Ethics Service and the Ethics and Confidentiality Committee of the National Information Governance Board advised that formal ethical approval was not required because this was an audit and patient identifiable data were not being collected. All procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Declaration of Helsinki of 1975, as revised in 2008.

Exposure, outcome measures and covariates

Patients were categorized according to whether they had a confirmed secondary diagnosis of 'personality disorder' (ICD code F60), as recorded on the audit tool. No information on specific personality disorder subtype was gathered. Quality of clinical care was assessed using data from 24 questions (see Table 1) based on the 'Standards for Inpatient Mental Health Services' as defined by the Royal College of Psychiatrists' College Centre for Quality Improvement.[32]

A number of categorical variables were also recorded as covariates—primary and secondary diagnoses, age, gender, ethnicity, employment status, accommodation status, length of admission and mode of admission (whether admitted under the provisions of the Mental Health Act).

Information was also recorded on which medications patients were prescribed, and these were categorized by class, i.e. antidepressant, anxiolytic (including benzodiazepine or other), antipsychotic and mood stabilizer.

A full copy of the national audit report is available online.[33]

Statistical methods

All study analyses were conducted using SPSS.[34] We first calculated the proportion of patients who had a secondary diagnosis of personality disorder. The association of covariates (primary/secondary diagnosis, age, gender, ethnicity, employment/accommodation status and mode of admission) with personality disorder was investigated using univariate logistic regression. The association of personality disorder with each of the primary

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Table 1: 'Quality of Clinical Care' measures (primary outcome measures)

1	Did the (initial) assessment include details about the service user's past response to treatment?
2	Did the (initial) assessment consider whether the service user had a history of trauma?
3	Was there a documented current BMI?
4	Was there a documented current smoking status?
5	Was the identified family member, friend or carer provided with information about available support services and/or a support plan? (where an appropriate family member, friend or carer had been identified)
6	Was the identified family member, friend or carer offered a carer's assessment? (where an appropriate family member, friend or carer had been identified)
7	Did the service user have a care plan?
8	Is there evidence that the care plan was jointly developed between the service user and clinician?
9	Was the service user given a copy of their care plan?
10	Was the service user referred for psychological therapy?
11	Did the service user commence psychological therapy before the end of the audit period? (only among those who had been referred)
12	Was the service user given at least 24-h notice of discharge?
13	Was the identified family member, friend or carer given at least 24-h notice of discharge? (where an appropriate family member, friend or carer had been identified)
14	Was the service user being prescribed psychotropic medication at the point of discharge?
15	Was the service user given verbal and/or written information about their medication prior to discharge?
16	Did a review of the service user's medication(s) take place prior to discharge?
17	At discharge, was the service user given 'to take home' (TTO) medication
18	Did the service user have a crisis plan at the point of discharge?
19	Was a discharge letter sent to the service user's GP within 24 h?
20	Was a care plan sent to a nominated person in an accepting service? (where an appropriate service had been identified)
21	Did the service user receive follow-up within 48 h of discharge?
22	Did a review of the service user's medication(s) take place between discharge and the end of the audit period?
23	Was an appropriately validated outcome measure completed?
24	Was the service user readmitted to hospital between discharge and the end of the audit period?

BMI, body mass index; GP, general practitioner.

outcome measures was then measured using binomial logistic regression.

As patients were clustered within different services and because quality of care for patients within a given service may be more similar than for patients in different services, all analyses were adjusted using multilevel logistic regression. Initially, the association between personality disorder and each quality of care variable was examined without considering any confounding variables. The analysis was then repeated, adjusting for covariates found to be associated with the primary outcome measures (including source organization).

Results

Fifty-four NHS trusts submitted data for the audit (all of those which were eligible). Data from 3 795 patients' case notes were analysed, of which 416 (11.0%) had a secondary diagnosis of personality disorder.

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Table 2: Analysis of demographic/clinical factors associated with personality disorder

	Personality disorder *N* (% of row)	No personality disorder *N* (% of row)	Unadjusted OR (95% CI)	*p*	Adjusted[a] OR (95% CI)	*p*
Age *n* = 3 795						
<18	7 (7.4)	88 (92.6)	0.54 (0.24 to 1.21)	0.134	0.51 (0.19 to 1.39)	0.186
18 to 24	73 (17.9)	334 (82.1)	1.49 (1.07 to 2.08)	0.020	1.58 (1.04 to 2.41)	0.032
25 to 34	113 (16.4)	574 (83.6)	1.34 (0.99 to 1.81)	0.054	1.63 (1.16 to 2.30)	0.005
35 to 44	82 (13.4)	530 (86.6)	1.05 (0.77 to 1.45)	0.747	1.17 (0.81 to 1.69)	0.403
45 to 54	91 (12.8)	620 (87.2)	Ref		Ref	
55 to 64	35 (6.9)	469 (93.1)	0.51 (0.34 to 0.77)	0.001	0.45(0.27 to 0.74)	0.002
65 to 74	11 (2.6)	409 (97.4)	0.18 (0.10 to 0.35)	<0.001	0.55 (0.19 to 1.58)	0.267
75+	4 (1.1)	355 (98.9)	0.08 (0.03 to 0.21)	<0.001	0.33 (0.08 to 1.32)	0.116
Gender *n* = 3 789						
Male	170 (8.7)	1 774 (91.3)	Ref		Ref	
Female	246 (13.3)	1 599 (86.7)	1.61 (1.31 to 1.97)	<0.001	1.94 (1.51 to 2.47)	<0.001
Ethnicity *n* = 3 565						
White	362 (11.3)	2 832 (88.7)	Ref		Ref	
Black	10 (12.3)	71 (87.7)	1.10 (0.56 to 2.16)	0.777	0.74 (0.34 to 1.60)	0.445
Asian	11 (7.2)	141 (92.8)	0.61 (0.33 to 1.14)	0.120	0.34 (0.15 to 0.73)	0.006
Mixed	10 (14.5)	59 (85.5)	1.33 (0.67 to 2.62)	0.415	0.95 (0.45 to 2.01)	0.895
Other	6 (8.7)	63 (91.3)	0.75 (0.32 to 1.73)	0.495	0.69 (0.27 to 1.78)	0.442
Employment *n* = 3 305						
Unemployed	106 (12.5)	745 (87.5)	Ref		Ref	
Employed	79 (9.2)	781 (90.8)	0.71 (0.52 to 0.97)	0.030	0.68 (0.48 to 0.94)	0.021
Long-term sick	128 (19.2)	537 (80.8)	1.68 (1.27 to 2.22)	<0.001	1.81 (1.33 to 2.46)	<0.001
Retired	13 (1.7)	759 (98.3)	0.12 (0.07 to 0.22)	<0.001	0.26 (0.09 to 0.76)	0.014
Student	24 (15.3)	133 (84.7)	1.27 (0.79 to 2.05)	0.332	1.25 (0.65 to 2.38)	0.507
Accommodation *n* = 3 508						
Mainstream	320 (10.9)	2 616 (89.1)	Ref		Ref	
Supported	16 (8.6)	170 (91.4)	0.77 (0.46 to 1.30)	0.328	0.69 (0.38 to 1.28)	0.240
Homeless	31 (13.9)	192 (86.1)	1.32 (0.89 to 1.96)	0.170	1.28 (0.81 to 2.01)	0.288
Other	18 (11.0)	145 (89.0)	1.02 (0.61 to 1.68)	0.954	0.81 (0.44 to 1.48)	0.495
Detention status *n* = 3 795						
Informal	351 (11.1)	2 814 (88.9)	Ref		Ref	
Formal	65 (10.3)	565 (89.7)	0.92 (0.70 to 1.22)	0.571	0.90 (0.64 to 1.26)	0.549

	Personality disorder			No personality disorder			Unadjusted		*p*	Adjusted[a]		*p*
	Mean	Median	STD	Mean	Median	STD	*B* coefficient	95% CI		*B* coefficient	95% CI	
Wait time for bed *n* = 2 207	38.63 h	5.27 h	69.71 h	31.70 h	5.41 h	57.06 h	6.93 h	−14.67 to 28.54 h	0.529	8.70 h	− 10.66 to 28.07 h	0.378
Length of admission *n* = 3 795	25.76 days	11.00 days	44.91 days	26.36 days	13.00 days	39.03 days	− 0.60 days	− 5.06 to 3.84 days	0.788	2.76 days	− 2.15 to 7.66 days	0.271

CI, confidence interval; OR, odds ratio.
[a]Adjusted for National Health Service trust, age, gender, ethnicity, employment status and primary/secondary diagnosis.

Table 2 summarizes the demographic and clinical characteristics of patients with co-morbid personality disorder compared with those without such co-morbidity. Recorded co-morbid personality disorder was more likely in patients aged less than 34 years but less likely among patients aged between 55 and 64 years. Female patients and patients who were recorded as having long-term sickness were more likely to have a diagnosis of co-morbid personality disorder, but Asian patients and patients who were employed or retired were less likely to have a co-morbid diagnosis. The presence of personality disorder was not associated with differences in the mode of admission (whether admitted compulsorily under the UK Mental Health Act), wait time for beds or length of admission.

Table 3 and Figure 1 summarize the findings of multivariate regression analyses of the association of personality disorder with primary outcome measures. Patients with personality disorder were less likely to have been asked about prior responses to treatment in their initial assessment (odds ratio (OR) = 0.67, 95% confidence interval (CI) 0.50 to 0.89, $p = 0.007$) and less likely to have had a recorded body mass index (BMI) (OR = 0.72, 95% CI 0.56 to 0.92, $p = 0.008$). In addition, the carers of patients with co-morbid personality disorder were less likely to have been provided with information about available support services (OR = 0.73, 95% CI 0.51 to 0.93, $p = 0.045$).

Patients with co-morbid personality disorder were less likely to receive adequate (24 h) notice in advance of their discharge (OR = 0.87, 95% CI 0.65 to 0.98, $p = 0.046$). Although they were more likely to have been prescribed medication at the point of discharge (OR = 1.52, 95% CI 1.02 to 2.09, $p = 0.012$), they were less likely to have been provided with information about the medicines they were taking (OR = 0.86, 95% CI 0.69 to 0.94, $p = 0.048$). Table 4 summarizes the multivariate regression analyses of the association of personality disorder with prescription of psychotropic medications. Patients with co-morbid personality disorder were more likely to be

Table 3: Association of personality disorder with quality of care measures

Primary outcome	Personality disorder *N*/total (%)	No personality disorder *N*/total (%)	OR 95% CI	*p*	Adjusted[a] OR 95% CI	*p*
Assessment included trauma?	258/321 (80.4)	1 981/2 515 (78.8)	1.10 (0.83 to 1.48)	0.506	1.19 (0.86 to 1.65)	0.298
Assessment included past treatment?	241/323 (74.6)	2 011/2 435 (82.6)	0.62 (0.47 to 0.81)	0.001	0.67 (0.50 to 0.89)	0.007
BMI recorded	231/343 (67.3)	2 078/2 860 (72.7)	0.78 (0.61 to 0.98)	0.038	0.72 (0.56 to 0.92)	0.008
Smoking status recorded	271/343 (79.0)	2 403/2 860 (84.0)	0.72 (0.54 to 0.95)	0.018	0.75 (0.56 to 1.01)	0.059
Care plan completed	308/343 (89.8)	2 607/2 859 (91.2)	0.85 (0.59 to 1.24)	0.395	0.84 (0.57 to 1.24)	0.388
Care plan developed jointly	255/308 (82.8)	2 130/2 607 (81.7)	1.08 (0.79 to 1.47)	0.639	1.28 (0.91 to 1.79)	0.156
Patient received copy of care plan	163/308 (52.9)	1 482/2 607 (56.8)	0.85 (0.67 to 1.08)	0.189	0.93 (0.73 to 1.18)	0.529
Carer provided info re: support services available	98/174 (56.3)	1 124/1 785 (63.0)	0.76 (0.55 to 1.04)	0.084	0.73 (0.51 to 0.93)	0.045
Carer offered care needs assessment	43/174 (24.7)	444/1 785 (24.9)	0.99 (0.69 to 1.42)	0.963	1.05 (0.74 to 1.52)	0.759
Crisis plan in place at discharge	246/343 (71.7)	2 136/2 859 (74.7)	0.86 (0.67 to 1.10)	0.230	0.84 (0.63 to 1.10)	0.205
Prescribed medication at discharge?	311/343 (90.7)	2 498/2 860 (87.3)	1.41 (0.96 to 2.06)	0.076	1.52 (1.02 to 2.09)	0.012
Medication reviewed during admission?	273/310 (88.1)	2 162/2 493 (86.7)	1.13 (0.79 to 1.62)	0.509	1.43 (0.96 to 2.06)	0.079
Patient given info re: medication?	209/311 (67.1)	1 836/2 498 (73.5)	0.85 (0.66 to 1.05)	0.160	0.86 (0.72 to 0.98)	0.048
TTA medication provided at discharge?	267/314 (85.0)	2 280/2 697 (84.5)	1.04 (0.75 to 1.44)	0.819	1.22 (0.83 to 1.77)	0.310
Medication reviewed after discharge?	185/222 (83.3)	1 503/1 729 (86.9)	0.75 (0.51 to 1.10)	0.140	0.88 (0.62 to 1.46)	0.951
Referred to psychology?	175/416 (42.1)	1 208/3 378 (35.8)	1.21 (0.96 to 1.46)	0.078	1.26 (1.02 to 1.48)	0.042
Commenced psychology?	91/148 (61.5)	681/1 053 (64.7)	0.87 (0.61 to 1.24)	0.449	0.91 (0.61 to 1.36)	0.653
Outcome measure completed	252/416 (60.6)	2 062/3 379 (61.0)	0.98 (0.80 to 1.21)	0.860	1.09 (0.86 to 1.39)	0.480
Readmission within audit period	68/358 (19.0)	344/2 943 (11.7)	1.77 (1.33 to 2.36)	<0.001	1.82 (1.31 to 2.34)	<0.001
Patient given notice of discharge	247/358 (69.9)	2 282/2 943 (77.5)	0.91 (0.73 to 1.05)	0.106	0.87 (0.65 to 0.98)	0.046
Carer given notice of discharge	125/180 (69.4)	1 276/1 831 (69.7)	0.99 (0.71 to 1.38)	0.946	1.01 (0.78 to 1.37)	0.183
Discharge letter sent to GP within 48 h	158/300 (52.7)	1 325/2 533 (52.3)	1.01 (0.80 to 1.29)	0.907	1.06 (0.80 to 1.38)	0.695
Copy of care plan sent to accepting service	138/211 (65.4)	1 388/1 819 (76.3)	0.59 (0.43 to 0.79)	0.001	0.68 (0.47 to 0.98)	0.042
Follow-up within 48 h of discharge	171/298 (57.4)	1 381/2 528 (54.6)	1.12 (0.88 to 1.43)	0.366	1.12 (0.85 to 1.48)	0.418

CI, confidence interval; OR, odds ratio; GP, general practitioner.

[a]Adjusted for National Health Service trust, age, gender, ethnicity, employment status and primary/secondary diagnosis.

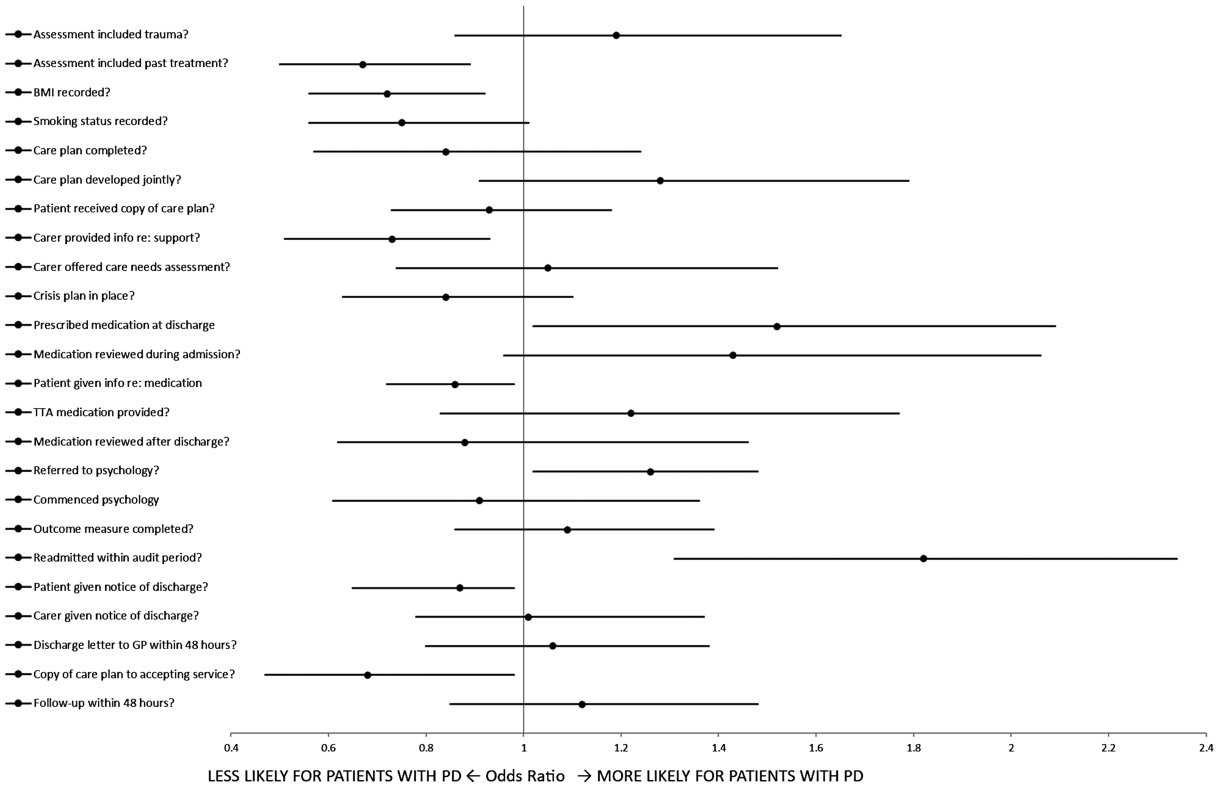

Figure 1: Forest plot of association of coexisting personality disorder with quality of care measures. BMI, body mass index; PD, personality disorder

Table 4: Association of personality disorder with medication prescribed

Medication	Personality disorder *N*/total (%)	No personality disorder *N*/total (%)	OR 95% CI	*p*	Adjusted[a] OR 95% CI	*p*
Antidepressant	317/416 (76.2)	2 647/3 379 (78.3)	0.89 (0.70 to 1.13)	0.320	1.07 (0.81 to 1.42)	0.634
Anxiolytic	146/416 (35.1)	953/3 379 (28.3)	1.38 (1.11 to 1.71)	0.003	1.52 (1.18 to 1.96)	0.001
Benzodiazepine	61/416 (14.7)	438/3 379 (13.0)	1.15 (0.86 to 1.54)	0.333	1.37 (0.97 to 1.92)	0.072
Antipsychotic	197/416 (47.4)	1 064/3 379 (31.5)	1.96 (1.59 to 2.40)	<0.001	1.93 (1.52 to 2.45)	<0.001
Mood stabilizer	43/416 (10.3)	199/3 379 (5.9)	1.84 (1.30 to 2.61)	<0.001	2.25 (1.48 to 3.43)	<0.001

[a]Adjusted for National Health Service trust, age, gender, ethnicity, employment status and primary/secondary diagnosis.

prescribed anxiolytics (OR = 1.52, 95% CI 1.18 to 1.96, $p = 0.001$), antipsychotics (OR = 1.93, 95% CI 1.52 to 2.45, $p < 0.001$) and mood stabilizers (OR = 2.25, 95% CI 1.48 to 3.43, $p < 0.001$).

Following discharge, it was less likely that a copy of their care plan was forwarded on to an accepting community service (OR = 0.68, 95% CI 0.47 to 0.93, $p = 0.042$), and they were

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significantly more likely to be readmitted during the audit period (OR = 1.82, 95% CI 1.31 to 2.54, $p < 0.001$). Patients with personality disorder were more likely to be referred for psychological therapy (OR = 1.26, 95% CI 1.05 to 1.48, $p = 0.042$) but were no more likely to have commenced such therapy at the end of the audit period.

Discussion

The findings from this study suggest that the quality of inpatient care for anxiety and depression provided is poorer when people have co-occurring personality disorder. We found differences across multiple stages of inpatient admission (including the initial assessment process, treatments offered and discharge planning). Although there were significant demographic differences between groups, the differences in care standards were independent of demographic factors.

In most areas where there were differences between groups, patients with co-occurring personality disorder received lower quality care than those without. However, patients with personality disorder were more likely to be referred for psychological therapy and more likely to be prescribed psychotropic medication. Patients with personality disorder were more likely to be prescribed psychotropic medications (other than antidepressants) but were significantly less likely to be given information about the medication they were prescribed.

Strengths and limitations

Data were obtained from a large heterogeneous sample, derived from every NHS trust providing acute psychiatric inpatient care for patients with anxiety and depression in England. We expect that our findings would be generalizable to similar patient groups in wider inpatient clinical practice. The primary outcome measures we used to assess quality of clinical care were based on NICE guidance[29–31] and standards for inpatient services published by the Royal College of Psychiatrists[32] and were refined with feedback from an expert group of service users and providers.

There are important limitations. Data were gathered from a retrospective case note audit and are therefore dependant on accurate reporting and documentation of events at the time of occurrence. Case notes were written by clinicians and may not fully capture patient/carer perspectives or experience (e.g. whether they were given sufficient information about medication or available services).

Restricting the sample to patients with a primary diagnosis of an anxiety disorder or depressive illness means that the results may not be generalizable to other patient groups such as those with other primary diagnoses or those who were admitted to hospital because of behaviour or symptoms related to their personality disorder alone.

The prevalence of co-morbid personality disorder in our sample (11.0%) also fell short of estimates obtained from previous studies of inpatients with anxiety and depression.[35,36] There is evidence that personality disorders are underdiagnosed in clinical samples[37] and patients with emotionally unstable, histrionic and dissocial personality traits may be over-represented among those who do receive a formal diagnosis.[35] Our study did not differentiate between subtypes of personality disorder, so we were unable to identify whether this was the case in our sample. There may, therefore, be patients who fulfil diagnostic criteria for personality disorder but are less likely to receive a formal diagnosis (e.g. potentially those with avoidant/dependant/anankastic traits) to whom our conclusions do not apply.

Although we gathered detailed clinical information about patients (primary/secondary diagnosis, mode/length of admission, etc.), there may have been important but 'uncaptured' differences between groups, such as variations in illness severity within one primary diagnosis, or level of support in the community. Finally, as the data are cross-sectional, we are unable to fully explore temporal associations between diagnosis of personality

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disorder and measures of quality of care. The presence of co-morbid personality disorder (and associated behaviours or symptoms) may have led to variation in the quality of clinical care, bur poor quality of care might have resulted in frustration and behaviours or symptoms that made a diagnosis of personality disorder more likely.

Implications

We found evidence that quality of care in patients with anxiety or depression who were admitted to psychiatric inpatient services varies between those with or without a co-morbid personality disorder, the majority of differences suggesting shortfalls in care for patients with co-morbidity. This is consistent with previous findings that patients with personality disorder generally describe inpatient treatment as a negative experience.[25–27] Those studies focused primarily on hospitalization for behaviour/symptoms associated specifically with personality disorder (primarily emotionally unstable), and whether hospitalization is effective for these indications remains controversial,[38,39] although there is some evidence of its utility.[40] Our study had a different focus, but its findings indicate that even when admission is indicated for the treatment of an anxiety or depressive disorder, care may be affected by the presence of co-morbid personality disorder.

Our study identifies several specific areas where inpatient care for patients with co-morbid personality disorder could be improved. The first of these is the initial assessment process, where patients were less likely to be asked about past responses to treatment and less likely to have a recorded BMI (suggesting a less thorough assessment of physical health needs)—while their carers were less likely to be given information about support services available.

Another area of difficulty relates to collaborative decision making with patients with personality disorder, who were less likely to receive adequate (24 h) notice in advance of their discharge and less likely to have been provided with information about the treatment they were given. In previous studies, 80% of staff surveyed report finding individuals with a personality disorder diagnosis 'difficult to care for',[21] reporting that they provoked anger and hostility and describing them as 'manipulative' or 'threatening',[22,23] suggesting that staff may not feel confident in collaborative working with this patient group.

The fact that discharge planning is affected is a particular area of concern, as previous studies have identified this process of 'ending' as a crucial stage when considering the efficacy of inpatient treatment. Joint discharge planning has been shown to decrease feelings of anxiety/rejection often experienced by patients with personality disorder prior to discharge,[41] while clear links have been established between unplanned discharge and feelings of abandonment (and subsequent suicide threats) in patients specifically with emotionally unstable personality disorder.[42]

There is substantial evidence for the benefits of involving patients with personality disorder in decisions relating to their treatment. Reductions in general symptom distress and improvements in interpersonal functioning have been found when patients with emotionally unstable personality disorder are given more information about their diagnosis and treatments available.[43] Increasingly, guidance has emphasized the need for transparent and collaborative approaches with this population regarding their diagnosis and care, highlighting the importance of health literacy and self-management strategies.[13,17,44]

Training and support for clinicians and health service providers may improve care for this population and help reduce discrimination within systems of care. This may include a greater focus on reflection on the personal impact of working with patients with personality disorders and could be incorporated into regular supervision. A particular emphasis on patients' likely trauma history, trust and interpersonal issues may be beneficial. Existing guidance in this area emphasizes the importance of considering all aspects of the biopsychosocial formulation and establishing links

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between historical trauma and current symptoms in order to increase compassion, as well as improve care planning and risk management.[45]

Patients with personality disorder were more likely to be readmitted to hospital following discharge. This replicates similar findings from several studies[46,47] and may be related to the aforementioned variation in the discharge process or shortfalls in communication between inpatient and community services, which were also identified in this study.

Some of the differences in care identified in our study are more difficult to interpret—such as the findings that patients with personality disorder were more likely to be prescribed psychotropic medications from a variety of classes and more likely to be referred for psychological therapy. These may represent 'overtreatment' of primary diagnoses in the context of co-morbid personality disorder or suggest that treatments were being used to directly target symptoms associated with personality disorder rather than the primary diagnosis. The increased likelihood of referral for psychological therapy seems more promising. However, it is worth noting that the increased likelihood of referral did not equate to an increase in patients accessing treatment.

More research is needed to explore longer term outcomes of patients with personality disorder who receive inpatient treatment for anxiety and depression. Ideally, this should include assessment of patient and carer experience as well as measures such as unplanned readmission and other adverse events. This may be best achieved through prospective observational studies. These could also be used to examine the temporal relationship between quality of care and secondary diagnosis—i.e. whether poor care may contribute to the expression of symptoms or difficulties that then lead to a diagnosis of personality disorder.

While we feel that the variation in care between patients with personality disorder and those without is clinically important, it is also worth noting that the quality of care received by patients overall (irrespective of co-morbidity) fell below nationally agreed standards. For example, only half of patients received a follow-up within 48 h of discharge, or had a discharge letter sent to their general practitioner within 24 h, while only a quarter of carers were offered a care needs assessment. These aspects will be the focus of quality improvement activities and will be assessed in future rounds of the national audit.

Conclusions

This study examined whether the quality of inpatient care patients receive for anxiety and depression differs if they have a secondary diagnosis of personality disorder. We found significant differences in quality of care between those patients with co-morbid personality disorder and those without, most differences indicating worse quality care in patients with personality disorder. This association merits further research into factors obstructing good quality of care for patients with personality disorder and how these could be addressed.

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Declaration of Interest

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Author Contribution

M. C. and R. W. formulated the presented research question and designed the study. M. C. supervised the work; R. W. performed the statistical analysis, drafted the manuscript and designed the figures. E. R., N. F., L. F., A. Q. and D. B. were involved in gathering and processing the NCAAD data and commented on drafts of the manuscript.

Data Availability Statement

All authors had access to the full study dataset. The dataset is held by the NCAAD team at the RCPsych Centre for Quality Improvement and could be made available on request.

References

1. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005; **62**: 593.
2. Friborg O, Martinsen EW, Martinussen M, Kaiser S, Overgård KT, Rosenvinge JH. Comorbidity of personality disorders in mood disorders: a meta-analytic review of 122 studies from 1988 to 2010. *J Affect Disord* 2014; **152**: 1–11.
3. Reich J. The effect of Axis II disorders on the outcome of treatment of anxiety and unipolar depressive disorders: a review. *J Pers Disord* 2003; **17**: 387–405.
4. Deckert J, & Erhardt A. Predicting treatment outcome for anxiety disorders with or without comorbid depression using clinical, imaging and (epi)genetic data. *Curr Opin Psychiatry* 2019; **32**: 1–6.
5. Hölzel L, Härter M, Reese C, Kriston L. Risk factors for chronic depression—a systematic review. *J Affect Disord* 2011; **129**: 1–13.
6. Brieger P, Ehrt U, Bloeink R, Marneros A. Consequences of comorbid personality disorders in major depression. *J Nerv Ment Dis* 2002; **190**: 304–9.
7. Skodol AE, Grilo CM, Keyes KM, Geier T, Grant BF, Hasin DS. Relationship of personality disorders to the course of major depressive disorder in a nationally representative sample. *Am J Psychiatry* 2011; **168**: 257–64.
8. McCarter KL, Halpin SA, Baker AL, Kay-Lambkin FJ, Lewin TJ, Thornton LK et al. Associations between personality disorder characteristics and treatment outcomes in people with co-occurring alcohol misuse and depression. *BMC Psychiatry* 2016; **16**: 210.
9. Gorwood P, Rouillon F, Even C, Falissard B, Corruble E, Moran P. Treatment response in major depression: effects of personality dysfunction and prior depression. *Br J Psychiatry* 2010; **196**: 139–42.
10. Soeteman DI, Hakkaart-van Roijen L, Verheul R, Busschbach JJV. The economic burden of personality disorders in mental health care. *J Clin Psychiatry* 2008; **69**: 259–65.
11. Newton-Howes G, Tyrer P, Johnson T. Personality disorder and the outcome of depression: meta-analysis of published studies. *Br J Psychiatry* 2006; **188**: 13–20.
12. Pompili M, Venturini P, Palermo M, Stefani H, Seretti ME, Lamis DA et al. Mood disorders medications: predictors of nonadherence—review of the current literature. *Expert Rev Neurother* 2013; **13**: 809–25.
13. Fanaian M, Lewis KL, Grenyer BFS. Improving services for people with personality disorders: views of experienced clinicians. *Int J Ment Health Nurs* 2013; **22**: 465–71.
14. Black DW, Pfohl B, Blum N, McCormick B, Allen J, North CS et al. Attitudes toward borderline personality disorder: a survey of 706 mental health clinicians. *CNS Spectr* 2011; **16**: 67–74.
15. Bodner E, Cohen-Fridel S, Mashiah M, Segal M, Grinshpoon A, Fischel T et al. The attitudes of psychiatric hospital staff toward hospitalization and treatment of patients with borderline personality disorder. *BMC Psychiatry* 2015; **15**: 2.
16. Rogers B, & Acton T. "I think we're all guinea pigs really": a qualitative study of medication and borderline personality disorder. *J Psychiatr Ment Health Nurs* 2012; **19**: 341–7.
17. National Institute for Health and Care Excellence (NICE). Borderline personality disorder: recognition and management (CG78). NICE, 2009.
18. Paton C, Crawford MJ, Bhatti SF, Patel MX, Barnes TRE. The use of psychotropic medication in patients with emotionally unstable personality disorder under the care of UK mental health services. *J Clin Psychiatry* 2015; **76**: e512–e518.
19. Sansone RA, Rytwinski D, Gaither GA. Borderline personality and psychotropic medication prescription in an outpatient psychiatry clinic. *Compr Psychiatry* 2003; **44**: 454–8.

20. Hayward M, Slade M, Moran PA. Personality disorders and unmet needs among psychiatric inpatients. *Psychiatr Serv* 2006; **57**: 538–43.
21. James PD, & Cowman S. Psychiatric nurses' knowledge, experience and attitudes towards clients with borderline personality disorder. *J Psychiatr Ment Health Nurs* 2007; **14**: 670–8.
22. Deans C, & Meocevic E. Attitudes of registered psychiatric nurses towards patients diagnosed with borderline personality disorder. *Contemp Nurse* 2006; **21**: 43–49.
23. Woollaston K, & Hixenbaugh P. "Destructive whirlwind": nurses' perceptions of patients diagnosed with borderline personality disorder. *J Psychiatr Ment Health Nurs* 2008; **15**: 703–9.
24. Stapleton A, & Wright N. The experiences of people with borderline personality disorder admitted to acute psychiatric inpatient wards: a meta-synthesis. *J Ment Health* 2019; **28**: 443–57.
25. Gilburt H, Rose D, Slade M. The importance of relationships in mental health care: a qualitative study of service users' experiences of psychiatric hospital admission in the UK. *BMC Health Serv Res* 2008; **8**: 92.
26. Fallon P. Travelling through the system: the lived experience of people with borderline personality disorder in contact with psychiatric services. *J Psychiatr Ment Health Nurs* 2003; **10**: 393–400.
27. Rogers B, & Dunne E. "They told me i had this personality disorder… All of a sudden i was wasting their time": personality disorder and the inpatient experience. *J Ment Health* 2011; **20**: 226–33.
28. Royal College of Psychiatrists. College Centre for Quality Improvement (CCQI). *National Clinical Audit of Anxiety and Depression (NCAAD) Audit Implementation Guidance for Local Audit Leads*. RCPsych, 2018. Available at: www.rcpsych.ac.uk/ncaad.
29. National Institute for Health and Care Excellence (NICE). Common mental health problems: identification and pathways to care (CG123). NICE, 2011.
30. National Institute for Health and Care Excellence (NICE). Service user experience in adult mental health: improving the experience of care for people using adult NHS mental health services (CG136). NICE, 2011.
31. National Institute for Health and Care Excellence (NICE). Transition between inpatient mental health settings and community or care home settings (NG53). NICE, 2016.
32. Royal College of Psychiatrists. College Centre for Quality Improvement (CCQI). *Standards for Inpatient Mental Health Services, second edition*. RCPsych, 2017. Available at: https://www.rcpsych.ac.uk/improving-care/ccqi/resources/core-standards-project.
33. Royal College of Psychiatrists. How are inpatient mental health services for people with anxiety and depression performing? Main findings from the National Clinical Audit of Anxiety and Depression: a report co-produced with service users and carers. RCPsych, 2019. Available at: https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/national-clinical-audits/ncaad-documents/ncaad-main-report.pdf
34. IBM Corp. *IBM SPSS Statistics for Windows, Version 25*. IBM, 2017.
35. Corruble E, Ginestet D, Guelfi JD. Comorbidity of personality disorders and unipolar major depression: a review. *J Affect Disord* 1996; **37**: 157–70.
36. Marinangeli MG, Butti G, Scinto A, Di Cicco L, Kalyvoka A, Petruzzi C et al. Personality disorders prevalence study among inpatients with mood disorders, psychoactive use disorders and anxiety disorders. *Epidemiol Psychiatr Soc* 2000; **9**: 36–44.
37. Oldham JM, & Skodol AE. Personality disorders in the public sector. *Hosp Community Psychiatry* 1991; **42**: 481–7.
38. Verhaeghe M, & Bracke P. Ward features affecting stigma experiences in contemporary psychiatric hospitals: a multilevel study. *Soc Psychiatry Psychiatr Epidemiol* 2008; **43**: 418–28.
39. Bateman A, & Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. *Am J Psychiatry* 1999; **156**: 1563–9.
40. Helleman M, Goossens PJJ, Kaasenbrood A, van Achterberg T. Evidence base and components of brief admission as an intervention for patients with borderline personality disorder: a review of the literature. *Perspect Psychiatr Care* 2014; **50**: 65–75.
41. Paris J. *Treatment of Borderline Personality Disorder: A Guide to Evidence-based Practice*. New York: Guildford Press, 2008.
42. Wedig MM, Frankenburg FR, Bradford Reich D, Fitzmaurice G, Zanarini MC. Predictors of suicide threats in patients with borderline personality disorder over 16 years of prospective follow-up. *Psychiatry Res* 2013; **208**: 252–6.
43. McMain S, Links PS, Guimond T, Wnuk S, Eynan R, Bergmans Y et al. An exploratory study of the relationship between changes in emotion and cognitive processes and treatment outcome in borderline personality disorder. *Psychother Res* 2013; **23**: 658–73.
44. Bowen M. Borderline personality disorder: clinicians' accounts of good practice. *J Psychiatr Ment Health Nurs* 2013; **20**: 491–8.
45. Royal College of Psychiatrists. Position statement - services for people diagnosable with personality disorder (PS01/20). RCPsych, 2020. Available at: https://www.

rcpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/position-statements/ps01_20.pdf?sfvrsn=85af7fbc_2.
46. Rylander M, Colon-Sanchez D, Keniston A, Hamalian G, Lozano A, Nussbaum AM. Risk factors for readmission on an adult inpatient psychiatric unit. *Qual Manag Health Care* 2016; **25**: 22–31.
47. Ortiz G. Predictors of 30-day postdischarge readmission to a multistate national sample of state psychiatric hospitals. *J Healthc Qual* 2019; **41**: 228–36.

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